

OERLIKON AMMR 2.0

AESA MULTI-MISSION RADAR FAMILY

The Oerlikon Dual band AMMR (AESA Multi-Mission Radar) is a 3D Multi-band multifunction staring radar, based on GaN high-power solid state transmitting modules, adaptive digital beamforming techniques. Designed on a modular and scalable architecture the Radar offers superior performance, compact design, low weight, ease of operation, and can be elegantly integrated into a wide range of platforms, ground based, stationary and mobile, as well as naval.

It is specifically designed for short and very short range air defence (SHORAD/VSHORAD).

The AMMR 2.0 ensures strong resilience in severe electronic warfare environments (thanks to its state-of-the-art ECCM features) and allows to simultaneously exploit the advantages of both bands, resulting in improved performance in terms of detection, target classification, angular accuracy, and resolution (e.g. for swarm separation).

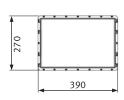
MAIN FEATURES

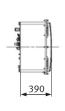
- Software-defined pulse Doppler multi-mission radar
- Simultaneous scanning for a wide range of threats
- AESA (Active Electronically Scanned Array) staring antenna
- Gallium nitride solid state amplifiers
- Fully digital beamforming technology
- Automatic target classification supported by AI (FW, RW, RAM, UAS, missile)
- SHORAD missile guidance
- Direct RF synthesis/sampling (TX/RX)
- Dual band operation (S-band and X-band)
- Smart calibration
- Scalable configuration, according to the required performance, in both radar bands.
- · Passive and multi-static operation capability
- Outstanding ECCM performance (wide band frequency
- management, track-on-jammer, asynchronous pulse suppression, anti-cover pulse, low probability of intercept, SLC/MLC/SLB)
- Modular and scalable architecture, compact design, low weight and easy installation (stationary and mobile)
- On the move operation
- High reliability, fault tolerant design
- Designed and qualified according to military standards



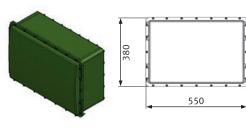
AMMR 2.0 - X1







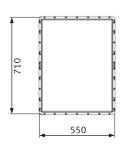
AMMR 2.0 - S1





AMMR 2.0 - S2

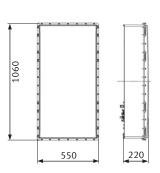






AMMR 2.0 - S3





SPECIFICATIONS					
Parameters	AMMR 2.	0 – X1	AMMR 2.0 – S1	AMMR 2.0 – S2	AMMR 2.0 – \$3
Frequency band	X-bar	nd	S-band	S-band	S-band
Volume coverage	360° azimuth, -20°÷70°				
Technology	AESA staring antenna, GaN solid state transmitters				
Interfaces	Ethernet, ASTERIX protocol				
Input power	28V				
Power consumption	2.3 kW		2.5 kW	5 kW	7.5 kW
Dimension	0.39 x 0.27 x 0.155		0.55 x 0.38 x 0.22	0.55 x 0.71 x 0.22	0.55 x 1.06 x 0.22
Weight (one panel)	18 kg		25 kg	50 kg	75 kg
Operative temperature	−40° to +50° plus solar radiation				
Detection range	Search	Cued Search			
Fighter aircraft	>20 km	>30 km	>20 km	>28km	>34km
Hovering helicopter	>12km	>18 km	>12km	>17km	>20km
Missile	>10 km	>15 km	>10 km	>14km	>17km
RAM/Micro UAS	>5 km	>7.5 km	>5km	>7km	>8.5km

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